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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference AP945PCT	FOR FURTHER ACTION See Form PCT/PEA/416	
International application No. PCT/CA2004/000396	International filing date (day/month/year) 19.03.2004	Priority date (day/month/year) 21.03.2003
International Patent Classification (IPC) or national classification and IPC H04M7/00, H04Q3/66		
Applicant EASYLINK NETWORKS INC. et al		
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 8 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>		
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>		
Date of submission of the demand 21.01.2005	Date of completion of this report 22.02.2005	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Pohl, M Telephone No. +49 89 2399-7367	



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/CA2004/000396

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
 - ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-23 as originally filed

Claims, Numbers

1-22 as originally filed

Drawings, Sheets

1/13-13/13 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
 - ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing *(specify)*:
 - ☐ any table(s) related to sequence listing *(specify)*:
 4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 - ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing *(specify)*:
 - ☐ any table(s) related to sequence listing *(specify)*:

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-19,21,22
	No: Claims	20
Inventive step (IS)	Yes: Claims	1-19
	No: Claims	20-22
Industrial applicability (IA)	Yes: Claims	1-22
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

**INTERNATIONAL PRELIMINARY
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Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Reference is made to the following documents:

D1: US-B1-6 205 135 (CHINNI VENKATA RAMANA ET AL) 20 March 2001 (2001-03-20)

D2: EP-A-1 061 728 (TELEDIS TELECOM DIENSTLEISTUNG)
20 December 2000 (2000-12-20)

2. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent apparatus **claim 20** is not new in the sense of Article 33(2) PCT.

2.1 Document D2 discloses, according to the features of independent apparatus claim 20, a subscriber interface unit (column 4, lines 33f. and 38 to 42) having a first port for connection to a subscriber telephone set (column 4, line 42f.), a second port for connection to a subscriber line (column 4, line 44 to 46), means for detecting dialled digits (column 3, lines 6 to 8) received via the first port and using at least some of the dialled digits to access stored data (column 5, lines 20 to 28) including ranges of destination numbers, and routing rules for different kinds of calls to determine whether the call should be routed via the PSTN or via a data network (paragraph [0012]) and, in the former case, connecting the first port directly to the second port (column 3, lines 11 to 14) and, in the latter case, converting (column 6, lines 5 to 9) subscriber signals to data signals having a format suitable for routing through the data network and for converting data signals received from the data network into signals having a format compatible with the subscriber telephone set, the data signals being routed to and from the second port via modem means (paragraph [0027]).

As a consequence, the subject-matter of claim 20 is not new and does not meet the requirements of Article 33(2) PCT.

The fact that, in contrast to the present application, destination Internet addresses have to be manually entered in the device disclosed in D2 is disregarded as this feature is not part of the definition of claim 20.

- 2.2 The subject-matter of claim 21 is considered to define minor implementational details not providing anything of inventive significance (Article 33(3) PCT).
3. Furthermore, the present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent method **claim 22** does not involve an inventive step in the sense of Article 33(3) PCT.

D1 discloses, according to the essential features of independent method claim 22, a process for providing dial tone (implicit; column 4, line 52) to a standard telephony device (151-N), collecting therefrom dialled digits (column 5, line 14f.) representing a telephone number of a called party (251-N) and comparing at least some of the dialled digits with stored data comprising at least one range of destination numbers (figs. 5 and 6), said range comprising at least one destination number, to determine whether or not to route the call over a public data network (column 5, lines 25 to 33); connecting through the PSTN (column 3, lines 8 to 10) to a data network connection point (102-1), converting signals from the standard telephony device from analog to digital (column 6, lines 31 to 35), placing the digital signals into packets acceptable by the data network, routing the call via the data network (fig. 1, "INTERNET") to a data connection exit point (202-1) convenient for a called party standard telephony device (251-N), receiving return digital signals from the called party standard telephony device via the data network, converting the return digital signals to analog and conveying the analog return signals to the subscriber telephony device (151-N).

Although minor implementational differences might exist between the definition of claim 22 and the disclosure of D1, the process of connecting two standard telephone devices via a data network is considered to be fully disclosed in D1.

Therefore, the subject-matter of claim 22 does not involve an inventive activity and does not meet the requirements of Article 33(3) PCT.

4. However, the subject-matter proposed in independent **claims 1 and 10** of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

4.1 Technical Field

The present application relates to a method (**claim 1**) and a system (**claim 10**) of routing telephone calls from a subscriber interface unit via the Public Switched Telephone Network (PSTN) or a public data network (e.g. the Internet).

4.2 Closest Prior Art

Document **D1**, which is considered the closest prior art, discloses an alternate access platform which is connected to a local exchange and both data and telephone networks. Calls are routed depending on a call profile. Document **D2** shows a least-cost-routing method choosing between a standard telephone network and an IP connection using a look-up table.

4.3 Problem

One method for call routing employs re-diallers using a dedicated communication link. This method is only accessible to large companies. Another method is that of using two connected computers which are both equipped with communication hardware. This solution, however, is not useful for the general public due to special skills and hardware requirements. A third method, useful only for companies of a certain size, is that of employing a switching device between a PBX and a data network.

The problem to be solved by the present application is therefore the provision of a low cost and easy to use routing method.

4.4 Solution

The present invention solves the above problem by providing a subscriber interface unit at the customer premises, thereby creating a distributed service system, where all routing decisions are made at the customer premises, thereby avoiding expensive equipment or deployment costs of centralized solutions as shown in e.g. D1.

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4.5 Conclusion

With none of the prior art documents disclosing nor rendering the above solution, the subject-matter of **claims 1 and 10** is considered as providing an inventive step over the prior art meeting the requirements of Article 33(3) PCT.

4.6 Claims 2 to 9 and 11 to 19 are dependent on claims 1 and 10 respectively and as such also meet the requirements of the PCT with respect to novelty and inventive step.

5. The subject-matter defined in **claims 1 to 22** is, however, industrially applicable (Article 33(4) PCT).